

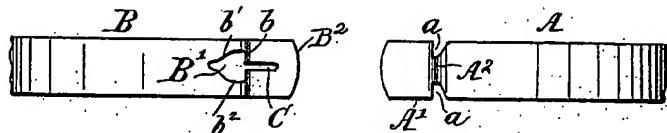
(No Model.)

J. R. McLAREN, Jr.  
BAND TIE.

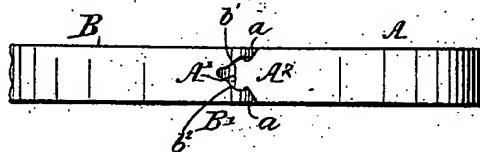
No. 427,355.

Patented May 6, 1890.

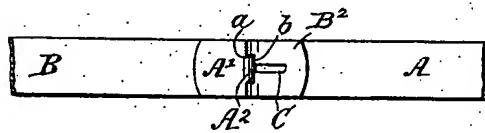
— Fig. 1 —



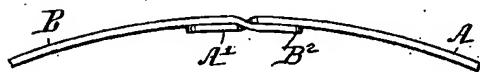
— Fig. 2 —



— Fig. 3 —



— Fig. 4 —



Witnesses

H. P. McLean.

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# UNITED STATES PATENT OFFICE.

JOHN R. McLAREN, JR., OF MONTREAL, QUEBEC, CANADA.

## BAND-TIE.

SPECIFICATION forming part of Letters Patent No. 427,355, dated May 6, 1890.

Application filed December 7, 1889. Serial No. 332,987. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROBERT MC-LAREN, Jr., of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Band-Ties; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has reference to the connecting together of the ends of strips of sheet metal, so as to form a continuous band—such, for instance, as the tire of children's wagons, tub and pail ties, or any like articles—dispensing with the necessity of an intermediate piece or plate between the ends of the band, doing away completely with the necessity of punching and riveting for making a continuous band, and obviating any chance of the ends becoming detached from each other by the loosening of such rivets, as the surface will be perfectly smooth. It may be described, briefly, as consisting in forming on one end of the strip a square head by cutting a notch from either side the desired distance toward the center, these notches being "birds-mouthed," or with the sides at an angle to each other and one side at right angles to the strip. At the desired distance from the other end of the strip I punch a hole, which may be in shape semicircular, arrow-headed, or triangular; but one side must be straight and at right angles to the length of the strip, and from this opening is taken lengthwise of the strip a central slot. To connect these the head at one end of the strip is slipped into the slot and opening in the other and then turned so that the neck of the head rests against the square seat of the opening, both ends being by this means turned under, and a continuous plane external surface is presented.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 shows the ends of the strip apart;

Fig. 2, a top view of the ends of strip joined; Fig. 3, a view of under side of same, and Fig. 4 a side view.

Similar letters of reference indicate like parts.

In the end A of the strip I cut on either side notches *a*, forming a square head *A'*, connected with the strip by a neck *A<sup>2</sup>*. B is the corresponding end of the strip or band. In this I form an opening *B'*, preferably of a triangular shape, having one side *b* at right angles to the length of *B* and its other two sides *b'* *b<sup>2</sup>* joining to form the triangle. These sides *b'* *b<sup>2</sup>* may be either straight or of a single curve, or a curve may be substituted for them.

*C* is a slot taken longitudinally from *b* in the end *B<sup>2</sup>* or from the apex of the opening *B'*. The metal of the end *A* is bent at the neck *A<sup>2</sup>*, so as to allow the head *A'* to lie under the band *B*, and the end *B* bent on the line of *b*, so as to allow *B<sup>2</sup>* to lie under the band *A*. To connect these ends *A* *B* and form the continuous band, the head *A'* is passed edgewise down through the slot *C* and opening *B'* and then turned, by this action bringing the head *A'* flat under *B* and the end *B<sup>2</sup>* under *A*. The tension-strain is borne by the square shoulders of the head *A'* bearing against the metal of *B*. By this construction both ends of the band lie flat under each other and the external surface is a continuous plane or curve.

What I claim is as follows:

In a band-tie, the combination of the end *A*, with head *A'* formed thereon and bent below level of band, and end *B*, having opening *B'* and slot *C* formed in it, and with extreme end *B<sup>2</sup>* similarly bent down below level of band, all as herein set forth, and for the purposes set forth.

J. R. McLAREN, JR.

Witnesses:

FRAS. HY. REYNOLDS,  
FRED. J. SEARS.